UNITED STATES PATENT AND TRADEMARK OFFICE

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EXAMINER
VIZVARY, GERALD C

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _12 February 2009_.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-20_ is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-20_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a)☐ All   b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Response to Amendment

1.　　In the amendment filed 2/12/2009, the following has occurred: claims 1, 6, 8, 9, 15, 19 & 20 have been amended. Now, claims 1-20 are presented for examination.

Claim Rejections - 35 USC § 103

2.　　The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3.　　Claims 1, 2, 4-10, 12, 13, 15, 16 & 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith US 2003/004780 A1 in view of Dogan US 6,018,317.

As per claim 1 (Currently Amended) Smith US 2003/004780 A1 discloses a system for forecasting weather-based demand, comprising:

a recombination processor; wherein:

said recombination processor is configured to receive <u>directly</u> weather ~~metric~~ metrics data ("The weather module 103 sends weather requests 209 to the weather information provider. ("Weather information provider 105 translates meteorological data into variables 201 that may be used in the weather module 103." Smith (US 2003/004780 A1 ¶ [0029]);

said recombination processor is configured to receive ~~directly~~ a weather factor

relationship knowledgebase, wherein the weather factor relationship knowledgebase is

different from the weather ~~metric~~ metrics data; and

("With respect to data provided by weather information provider 105a and 105b, certain

information may be used by weather module 103a and 103b and/or enterprise system

101a and 101b in order to provide specific analysis. Relevant meteorological

information should be on a time and geographic scale commensurate with the decision

maker's (user's) needs." Smith US 2003/004780 A1 ¶ [0035])

Smith US 2003/004780 A1 fails to explicitly teach receiving directly weather ~~metric~~

metrics data and said recombination processor is configured to produce normalized

weather factor ~~metric~~ metrics data.

("The present invention resides in a system or method for processing cochannel signals

received at a sensor array and producing desired recovered signals or parameters as

outputs." Dogan US 6,018,317 col. 8, lines 25-28) and ("The term "cumulant" is defined

more completely in later sections of this specification, but for purposes of this general

discussion it is sufficient to note that cumulants are fourth-order (or higher even-order)

statistical moments of the received signals. The cross-cumulants are formed into a

vector which, upon normalization, becomes the next EGSV." Dogan US 6,018,317 col.

16, lines 39-44)

It would have been obvious to one of ordinary skill in the art at the time of the invention

to include direct data input and normalization as taught by Dogan US 6,018,317 in the

system of Smith US 2003/004780 A1, since the claimed invention is merely a

combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

As per claim 2 (Original) Smith US 2003/004780 A1 in view of Dogan US 6,018,317 teaches a system of claim 1.

Smith US 2003/004780 A1 further discloses said weather factor relationship knowledgebase is a weather-impact model. ("Scientific and technological advances in the fields of meteorological observations, modeling, forecasting, and use of information have resulted in informational products of known accuracy to various degrees. Such informational products range in time scales from the immediate present to years in advance and from spatial scales from a particular point to continents across the globe. Advances in predictability provide the potential for businesses to proactively mange their sensitivities to weather." Smith (US 2003/004780 A1 ¶ [0020])

As per claim 4 (Original) Smith US 2003/004780 A1 in view of Dogan US 6,018,317 teaches a system of claim 2.

Smith US 2003/004780 A1 fails to explicitly teach that said weather-impact model is derived from an analysis of normalized proxy sales history data. The examiner takes official notice that the use of proxy data is well known in the art.

Claims 12 & 18 are rejected under a similar rationale.

As per claim 5 (Original) Smith US 2003/004780 A1 in view of Dogan US 6,018,317 teaches a system of claim 4.

Smith US 2003/004780 A1 further discloses that said normalized proxy sales history data are derived from at least one of old sales history data for a product from an entity, sales history data for said product from a second entity, sales history data for said product from an outside source, sales history data for a category that includes said product, and sales history data for a proxy product that has a similar weather-based demand relationship as said product. ("The weather module may provide information relevant to component business processes of the enterprise system(s) based on meteorological and climatological information. Meteorological information generally refers to predictive or recent weather information, while climatological information generally refers to historical weather information." Smith 2003/004780 ¶ [0017])

As per claim 6 (Currently Amended) ~~The~~ Smith 2003/004780 discloses a system ~~of claim 1, further comprising~~ for forecasting weather-based demand, comprising:

a volatility scaling processor;

said volatility scaling processor is configured to receive said normalized weather factor metric data; said volatility scaling processor is configured to receive volatility scale factor data; and said volatility scaling processor is configured to produce scaled weather factor metric data. ("Such informational products range in time scales from the immediate present to years in advance and from spatial scales from a particular point to continents across the globe. Advances in predictability provide the potential for

businesses to proactively mange their sensitivities to weather. "Smith 2003/004780 ¶
[0043]) and

Smith 2003/004780 fails to explicitly teach <u>said recombination processor is configured
to receive a weather factor relationship knowledgebase</u> ("Beyond the forecast time
horizon, the weather module may use the climatological database as the sole source of
information to calculate the probability of weather events. However, it is also possible
that the weather module uses the information provided by the weather information
provider to predict whether a threshold is or may be exceeded within the forecast time
horizon, and use information in the climatological database to help calculate the
probability, or accuracy, of the prediction." Smith 2003/004780 ¶ [0043])<u>, a
recombination processor, wherein said recombination processor is configured to receive
weather metrics data, and said recombination processor is configured to produce
normalized weather factor metrics data</u>

Dogan US 6,018,317 teaches "The term "cumulant" is defined more completely in later
sections of this specification, but for purposes of this general discussion it is sufficient to
note that cumulants are fourth-order (or higher even-order) statistical moments of the
received signals. The cross-cumulants are formed into a vector which, upon
normalization, becomes the next EGSV." Dogan US 6,018,317 col. 16, lines 39-44) and

"The present invention resides in a system or method for processing cochannel signals
received at a sensor array and producing desired recovered signals or parameters as
outputs." Dogan US 6,018,317 col. 8, lines 25-28)

wherein: <u>said volatility scaling processor is different from said recombination processor</u>

Examiner takes official notice that it is old and well known in the art to use separate

processors for separate functions in the design of signal processing systems.

It would have been obvious to one of ordinary skill in the art at the time of the invention

to include direct data input and normalization as taught by Dogan US 6,018,317 in the

system of Smith US 2003/004780 A1, since the claimed invention is merely a

combination of old elements, and in the combination each element merely would have

performed the same function as it did separately, and one of ordinary skill in the art

would have recognized that the results of the combination were predictable.

As per claim 7 (Original) Smith US 2003/004780 A1 in view of Dogan US 6,018,317

teaches a system of claim 6.

Smith US 2003/004780 A1 further discloses a deaggregation processor; wherein: said

deaggregation processor is configured to receive said scaled weather factor metric

data; said deaggregation processor is configured to receive deaggregation data; and

said deaggregation processor is configured to produce deaggregated weather factor

metric data. ("Weather information provider 105 translates meteorological data into

variables 201 that may be used in the weather module 103. Enterprise system 101

translates user-defined thresholds and probability criteria 203 for particular actions

related to component business processes 113 (FIG. 1) into variables that may be used

in the enterprise planning system. The enterprise system 101 then communicates

information 205 to weather module 103, which analyzes the data provided and

communicates results 207 of the analysis to enterprise planning system 101 in order to incorporate weather information into component business processes. The weather module 103 sends weather requests 209 to the weather information provider. Each weather request may be a one time request on an as needed basis, or it may be a request for types of information (precipitation amount, wind direction, wind speed, etc.) that the weather module should receive from the weather information provider on a continued basis. Smith 2003/004780 ¶ [0029])

As per claim 8 (Currently Amended) ~~The~~ A system ~~of claim 1, further comprising~~ for forecasting weather-based demand, comprising:

a deaggregation processor wherein: <u>said deaggregation processor is different from said recombination processor;</u> said deaggregation processor is configured to receive said normalized weather factor metric data said deaggregation processor is configured to receive deaggregation data; and said deaggregation processor is configured to produce deaggregated weather factor metric data. ("Weather information provider 105 translates meteorological data into variables 201 that may be used in the weather module 103. Enterprise system 101 translates user-defined thresholds and probability criteria 203 for particular actions related to component business processes 113 (FIG. 1) into variables that may be used in the enterprise planning system. The enterprise system 101 then communicates information 205 to weather module 103, which analyzes the data provided and communicates results 207 of the analysis to enterprise planning system 101 in order to incorporate weather information into component business processes.

The weather module 103 sends weather requests 209 to the weather information provider. Each weather request may be a one time request on an as needed basis, or it may be a request for types of information (precipitation amount, wind direction, wind speed, etc.) that the weather module should receive from the weather information provider on a continued basis. Smith 2003/004780 ¶ [0029]) Examiner takes official notice that it is old and well known in the art to use separate processors for separate functions in the design of signal processing systems.

Smith 2003/004780 fails to explicitly teach <u>a recombination processor, wherein said recombination processor is configured to receive weather metrics data, said recombination processor is configured to receive a weather factor relationship knowledgebase, and said recombination processor is configured to produce normalized weather factor metrics data</u>

Dogan US 6,018,317 teaches "The term "cumulant" is defined more completely in later sections of this specification, but for purposes of this general discussion it is sufficient to note that cumulants are fourth-order (or higher even-order) statistical moments of the received signals. The cross-cumulants are formed into a vector which, upon normalization, becomes the next EGSV." Dogan US 6,018,317 col. 16, lines 39-44) and "The present invention resides in a system or method for processing cochannel signals received at a sensor array and producing desired recovered signals or parameters as outputs." Dogan US 6,018,317 col. 8, lines 25-28)

It would have been obvious to one of ordinary skill in the art at the time of the invention to include direct data input and normalization as taught by Dogan US 6,018,317 in the

system of Smith US 2003/004780 A1, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

As per claim 9 (Currently Amended) Smith 2003/004780 discloses a method for forecasting weather-based demand, comprising the steps of:

(2) ~~receiving,~~ receiving directly, at the processor, a weather factor relationship knowledgebase, wherein the weather factor relationship knowledgebase is different from the weather metric data; (3) forecasting, at the processor, the weather-based demand by using the weather metrics data and the weather factor relationship knowledgebase. ("With respect to data provided by weather information provider 105a and 105b, certain information may be used by weather module 103a and 103b and/or enterprise system 101a and 101b in order to provide specific analysis. Relevant meteorological information should be on a time and geographic scale commensurate with the decision maker's (user's) needs." Smith 2003/004780 ¶ [0035])

Smith 2003/004780 fails to explicitly teach (1) ~~receiving,~~ receiving directly, at a processor, weather metrics data;

Dogan US 6,018,317 teaches "The present invention resides in a system or method for processing cochannel signals received at a sensor array and producing desired recovered signals or parameters as outputs." Dogan US 6,018,317 col. 8, lines 25-28)

It would have been obvious to one of ordinary skill in the art at the time of the invention

to include direct data input as taught by Dogan US 6,018,317 in the system of Smith US

2003/004780 A1, since the claimed invention is merely a combination of old elements,

and in the combination each element merely would have performed the same function

as it did separately, and one of ordinary skill in the art would have recognized that the

results of the combination were predictable

As per claim 10 (Original) Smith US 2003/004780 A1 in view of Dogan US 6,018,317

teaches a method of claim 9.

Smith US 2003/004780 A1 further discloses that the weather factor relationship

knowledgebase is a weather-impact model. ("Weather information provider 105

translates meteorological data into variables 201 that may be used in the weather

module 103." Smith 2003/004780 ¶ [0029])

As per claim 13 (Original) Smith US 2003/004780 A1 in view of Dogan US 6,018,317

teaches a method of claim 9.

Smith 2003/00478 further teaches the step of: scaling the weather-based demand.

("Beyond the forecast time horizon, the weather module may use the climatological

database as the sole source of information to calculate the probability of weather

events. However, it is also possible that the weather module uses the information

provided by the weather information provider to predict whether a threshold is or may be

exceeded within the forecast time horizon, and use information in the climatological

database to help calculate the probability, or accuracy, of the prediction." Smith 2003/004780 ¶ [0043])

As per claim 15 (Currently Amended)) Smith US 2003/004780 A1 discloses a computer program product for forecasting weather-based demand, said computer program product having computer program code means embodied in a computer useable medium, said computer program code means comprising:

a first program code means for ~~receiving, at a processor,~~ causing a processor to directly receive weather metrics data;

a third program code means for ~~forecasting, at the processor,~~causing the processor to forecast the weather-based demand by using the weather metrics data and the weather factor relationship knowledgebase. ("With respect to data provided by weather information provider 105a and 105b, certain information may be used by weather module 103a and 103b and/or enterprise system 101a and 101b in order to provide specific analysis. Relevant meteorological information should be on a time and geographic scale commensurate with the decision maker's (user's) needs." Smith 2003/004780 ¶ [0035])

Smith 2003/004780 fails to explicitly teach a second program code means for ~~receiving,~~ ~~at the processor,~~ causing the processor to directly receive a weather factor relationship knowledgebase, wherein the weather factor relationship knowledgebase is different from the weather metric data;

Dogan US 6,018,317 teaches "The present invention resides in a system or method for processing cochannel signals received at a sensor array and producing desired recovered signals or parameters as outputs." Dogan US 6,018,317 col. 8, lines 25-28)

It would have been obvious to one of ordinary skill in the art at the time of the invention to include direct data input as taught by Dogan US 6,018,317 in the system of Smith US 2003/004780 A1, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable

As per claim 16 (Original) Smith US 2003/004780 A1 in view of Dogan US 6,018,317 teaches a computer program product of claim 15.

Smith 2003/00478 further discloses that the weather factor relationship knowledgebase is a weather-impact model. ("Weather information provider 105 translates meteorological data into variables 201 that may be used in the weather module 103." Smith 2003/004780 ¶ [0029])

As per claim 19 (Currently Amended) Smith US 2003/004780 A1 in view of Dogan US 6,018,317 teaches a computer program product of claim 15.

Smith 2003/00478 further discloses a fourth program code means for causing the processor to scale the weather-based demand.

"Beyond the forecast time horizon, the weather module may use the climatological
database as the sole source of information to calculate the probability of weather
events. However, it is also possible that the weather module uses the information
provided by the weather information provider to predict whether a threshold is or may be
exceeded within the forecast time horizon, and use information in the climatological
database to help calculate the probability, or accuracy, of the prediction." Smith
2003/004780 ¶ [0043])

4.   Claims 3, 11, 14, 17 & 20 are rejected under 35 U.S.C. 103(a) as being
unpatentable over Smith US 2003/004780 A1 in view of Dogan US 6,018,317 further in
view of Phillips 6,473,084 B1.

As per claim 3 (Original) Smith US 2003/004780 A1 in view of Dogan US 6,018,317
teaches a system of claim 2.

Smith 2003/004780 fails to show a weather-impact model comprising at least one of an
empirical scoring matrix, a weather indices' template, and a proxy model conditions
template

Phillips 6,473,084 B1 teaches "In the preferred embodiment of the invention, vectors of
forecasts for each individual are used as the columns in a matrix, with each row
associated with a particular forecast date." (Phillips 6,473,084 B1 col. 44 lines 54-57).

It would have been obvious to one of ordinary skill in the art at the time of the invention
to include empirical scoring matrix, a weather indices' template as taught by Phillips

6,473,084 B1 in the system of Smith US 2003/004780 A1, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

Claims 11 & 17 are rejected under a similar rationale

As per claim 14 (Original), Smith US 2003/004780 A1 in view of Dogan US 6,018,317 teaches a method of claim 9.

Smith 2003/004780: fails to explicitly show deaggregating the weather-based demand.

Phillips 6,473,084 teaches "Additional features of the invention include: also displaying on the same graph historical values for other variables; providing the ability to display the historical data and/or the predicted value for the prediction variable with respect to a different independent variable than in the initial graph; displaying multiple variables on an initial graph in a first view (e.g., a time series view) and then permitting the participant to obtain a view that is a rotation of the first view (e.g., a cross-maturity comparison view " Phillips 6,473,084 col. 9, lines 39-47).

It would have been obvious to one of ordinary skill in the art at the time of the invention to include deaggregating the weather-based demand as taught by Phillips 6,473,084 B1 in the system of Smith US 2003/004780 A1, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

As per claim 20 (Currently Amended) Smith US 2003/004780 A1 in view of Dogan US 6,018,317 teaches a computer program product of claim 15.

Smith 2003/004780: fails to explicitly show a fourth program code means for ~~deaggregating~~ causing the processor to deaggregate the weather-based demand.

Phillips 6,473,084 teaches "Additional features of the invention include: also displaying on the same graph historical values for other variables; providing the ability to display the historical data and/or the predicted value for the prediction variable with respect to a different independent variable than in the initial graph; displaying multiple variables on an initial graph in a first view (e.g., a time series view) and then permitting the participant to obtain a view that is a rotation of the first view (e.g., a cross-maturity comparison view " Phillips 6,473,084 col. 9, lines 39-47)

It would have been obvious to one of ordinary skill in the art at the time of the invention to include deaggregating the weather-based demand as taught by Phillips 6,473,084 B1 in the system of Smith US 2003/004780 A1, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

Response to Arguments

5.   Applicant's arguments with respect to claims 1-20 have been considered, but are moot in view of the new ground(s) of rejection.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office Action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gerald C. Vizvary whose telephone number is 571-270-3268. The examiner can normally be reached on Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ella Colbert can be reached on 571-272-6741. The fax phone number for the organization where this application or proceeding is assigned is 571-270-4268.

Information regarding the status of an application may be obtained from the
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system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/THOMAS A DIXON/
Supervisory Patent Examiner, Art Unit 3696

Gerald Vizvary
Patent Examiner, A.U. 3696
June 7, 2009